Paper No. 31

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PAUL H. TURNER

Appeal No. 97-0170
Application 08/154,550[1]

HEARD: AUGUST 4, 1997

Before CALVERT, COHEN and FRANKFORT, Administrative Patent Judges.

COHEN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 2 through 17. These claims constitute all of the claims remaining in this application filed November 19, 1993 for the

[1] Application filed November 19, 1993, for Reissue of U.S. Patent No. 4,971,344, granted November 20, 1990, based on application Serial No. 07/293,257, filed January 4, 1989. Reexamination certificate issued March 24, 1992.

reissue of U.S. Patent No. 4,971,344, issued November 20, 1990. On page 2 of the answer (Paper No. 22), the examiner indicated that claim 8 is now objected to as being dependent upon a rejected base claim, but is otherwise allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims. The examiner also pointed out that claim 17 is allowable over the prior art of record. Accordingly, this panel of the board has before it only the rejections of claims 2 through 7 and 9 through 16.

Appellant's disclosed invention pertains to a pedal driven bicycle. A basic understanding of the invention can be derived from a reading of exemplary claims 2 and 15, copies of which appear below.

2. In [in] a pedal driven bicycle having front and rear wheels, pedals for driving the rear wheel, a handle-bar portion for steering the front wheel, a frame portion to which said wheels, pedals and handle-bar portion are connected, and a front fork with a wheel suspension of the type having a pair of telescoping suspensions assemblies, each of which is disposed on a respective leg of the front fork for carrying the front wheel of the bicycle, the improvement wherein each of the telescoping suspension assemblies has a fluid containing circuit [means] including a means for preventing pedal drive energy absorption by locking the suspension assemblies against compression by resisting low input forces imposed upon the fork, via the handle-bar portion and frame portion[s] of the bicycle, [as a result of a pedaling action of a rider of] in response to

pedalling of the bicycle by a rider thereof and for enabling compression of the suspension assemblies for absorption of wheel impact shocks imposed upon the front fork by [a] the front wheel carried thereby by reacting [under] in response to the effect of high input forces.

15. In a pedal driven bicycle having a front fork with a wheel suspension of the type having a pair of telescoping suspension assemblies each of which is disposed on a respective leg of the front fork and has an upper and a lower telescoping tube, and damping means for controlling compression of the respective telescoping assembly, the improvement wherein a cross member interconnects a portion of a top part of the one lower telescoping tube with a portion of a top part of the other lower telescoping tube as a means for limiting twisting and rotation thereof, wherein a *cable-operated* wheel rim brake is carried by the lower telescoping tube [at areas] *proximal to each said portion* at which said cross member connects to said lower telescoping tubes [so as to enable] as a means for enabling the rim brake to travel with the lower telescoping tubes.

In rejecting appellant's claims under 35 U.S.C. § 102(b) and 35 U.S.C. § 103, the examiner has relied upon the references listed below[2]:

Kawaguchi	4,553,769	Nov. 19, 1985
Kawamura et al. (Kawamura)	4,834,223	May 30, 1989

[2] In the answer (page 2), the examiner indicates that the Dotti reference no longer is applied in the rejections. Thus, the listing of the Dotti reference in the answer (page 3) appears to have been simply inadvertent.

Rigaud (French)[3]	1,036,016	Sep. 2, 1953

Additional references relied upon by this panel of the board, infra, are:

Wallace[4]	2,196,089	Apr. 2, 1940
Japan (Utility Model)[5]	44-2897	Feb. 3, 1969

The following rejections are before us for review.

Claims 2 and 3 stand rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Kawaguchi.

Claims 2, 3, and 6 stand rejected under 35 U.S.C. § 102(e) as being clearly anticipated by Kawamura.

Claims 15 and 16 stand rejected under 35 U.S.C. § 102(b) as being clearly anticipated Rigaud.

Claims 3 through 7 and 9 through 14 stand rejected under 35 U.S.C. § 103 as being unpatentable over Rigaud in view of Kawaguchi.

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[3] A translation is appended to this opinion.

[4] The Wallace patent was cited during the prosecution of appellant's original patent application.

[5] This Japanese document is specified in the original reissue declaration of the present application. A translation thereof, submitted by appellant, is attached.

Claims 3 through 7 and 9 through 14 stand rejected under 35 U.S.C. § 103 as being unpatentable over Rigaud in view of Kawamura.

The full text of the examiner's rejections and response to the argument presented by appellant appears in the answer (Paper No. 22), while the complete statement of appellant's argument can be found in the main (pages 5 through 17) and reply briefs (Paper Nos. 21 and 23)[6].

In the main brief (page 5), appellant indicates that each of claims 2, 3, 15, and 17 are separately argued, and that claims 4 through 7, 9 through 14, and 16 rise or fall (stand or fall) with the claim(s) from which they depend.

OPINION

In reaching our conclusion on the issues raised in this appeal, this panel of the board has carefully considered appellant's specification and claims, the applied references[7],

[6] On reconsideration, the reply brief was entered as set forth in Paper No. 28.

[7] In our evaluation of the applied references, we have considered all of the disclosure of each reference for what it would have fairly taught one of ordinary skill in the art. See In re Boe, 355 F.2d 961, 965, 148 USPQ 507, 510 (CCPA 1966).
(continued...)

Exhibits A through J (Declaration of Stephen W. Simons, Declaration of Bradford Thorne, Declaration of Paul H. Turner, magazine articles, inter alia) and Exhibits A and B appended to the main and reply briefs, respectively, and the individual viewpoints of appellant and the examiner. As a consequence of our review, we make the determinations which follow.

The Rejection of Claims 2 and 3

We do not sustain the examiner's anticipation rejection of these claims based upon the Kawaguchi patent.

Initially, we note that of particular consequence in this appeal is the meaning of a means plus function recitation in claim 2, i.e., a means for preventing pedal drive energy adsorption by locking the suspension assemblies against compression by resisting low input forces imposed upon the fork, via the handle-bar portion and frame portion of the bicycle, in response to pedaling of the bicycle by a rider thereof and for enabling compression of the suspension assemblies for absorption

[7](...continued)
Additionally, this panel of the board has taken into account not only the specific teachings of each reference, but also the inferences which one skilled in the art would reasonably have been expected to draw from the disclosure. See In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

of wheel impact shocks imposed upon the front fork by the front wheel carried thereby by reacting in response to the effect of high input forces.

A claimed means for performing a specified function is construed to cover the corresponding structure described in the specification and equivalents thereof. See In re Donaldson Co., 16 F.3d 1189, 1193, 29 USPQ2d 1845, 1848 (Fed. Cir. 1994).

In the present case, appellant expressly discloses (column 3, line 67 to column 4, line 16) a dampening valve 60 with ports 64 (Figures 3 and 4) blocked at the upper outlet by a plate 66 held closed by a compressed spring 68. A counterbored area 72 allows a build-up of fluid pressure force under the plate 66 to be greater than that of the ports 64 themselves. This arrangement, as disclosed, creates a dampening characteristic that has much greater resistance to low input compressive forces (pedal forces) than in comparison to higher input forces (bump shock forces). This initial or low input force dampening is enough to lock the system and prevent the suspension from absorbing rider pedaling energy.

Based upon the above disclosure, it is readily apparent that a function achieved by the means now claimed is the locking

of the system or suspension assemblies, i.e., each suspension assembly is prevented from absorbing rider pedaling energy (low input force) by the blocking of the upper outlet by the plate 66, held closed by the compressed spring 68.

We share appellant's view that the claimed function would not be attainable by the telescopic front fork (Figure 2) discussed by Kawaguchi. We readily perceive the valve assembly 56 in this reference to be a free-floating pressure responsive valve. From our perspective, pedal drive energy imposed upon the inner tube 18 would clearly pressurize the lower fluid chamber in the outer tube 20 to move the unbiased floating valve upwardly effecting communication between the lower chamber and the upper fluid chamber in the inner tube 18. This function is not the locking function required by the means recitation of claim 2. For this reason, the rejection of claims 2 and 3 under 35 U.S.C. § 102(b) cannot be sustained.

The Rejection of Claims 2, 3, and 6

We do not sustain the examiner's rejection of these claims under 35 U.S.C. § 102(e) based upon the Kawamura patent.

As explained above relative to independent claim 2, the means recitation therein requires a locking function that prevents pedal drive energy absorption by the suspension assemblies.

Like appellant, we find that the Figure 14 embodiment in the Kawamura patent clearly permits flow across the spring-biased valve 60 in its closed position, as shown by the downwardly directed arrow on the right side of the drawing figure. Thus, it may fairly be said that the telescopic hydraulic damper of Kawamura is not locked to prevent pedal drive energy absorption. Thus, the claimed locking function is not taught by the Kawamura patent. Accordingly, the rejection of claims 2, 3, and 6 under 35 U.S.C. § 102(e) as being anticipated cannot be sustained.

The Rejection of Claims 15 and 16

We sustain the rejection of these claims under 35 U.S.C.§ 102(b).

Appellant's dispute with the examiner relative to the merits of this rejection (main brief, pages 10 through 12 and reply brief, pages 7 and 8) is focused upon the claimed

"proximal" relationship, asserted to be clearly absent from the Rigaud disclosure. More specifically, appellant relies upon the definition of proximal as being "next to or nearest the point of attachment" (Exhibit B attached to reply brief) and is of the opinion (reply brief, page 7) that the reference clearly shows the brake mounting location displaced a significant distance from the cross member connection location. In support of this perspective, appellant makes reference to the examiner's viewpoint (Exhibit B appended to main brief) expressed during a reexamination proceeding[8] involving the patent for which a reissue is now being sought (U.S. Patent No. 4,971,344). Appellant also makes reference to prior remarks in Exhibit C (main brief) and to the Declaration of Bradford Thorne (Exhibit D, Main Brief).

As background, we note that the disclosure (specification, claims, and drawing) in the original patent application did not establish any particular distance between the cross member or its point of interconnection to a portion of the top part of a lower telescoping tube and a cable-operated wheel rim

[8] Reexamination Control No. 90/002,416, filed August 26, 1991. Reexamination Certificate issued March 24, 1992.

brake carried by the lower telescoping tube. We are not in accord with the use of appellant's drawings to ascertain any particular distance between the mounting point of the brakes and the connection of the cross member to the lower tubes (main brief, page 11) since appellant's patent drawing was not disclosed as being to scale. Further, the showing in Figure 1, the only drawing figure displaying both the cross member 48 and the standard wheel rim friction brake 24, poorly portrays the spatial relationship between the cross member and the brake to the extent that the actual spacing therebetween is clearly indeterminate.

During the aforementioned reexamination proceeding, the specification was amended to specify that mounted to the lower sliding tubes 46, --at proximal points-- (column 2, lines 67) is a standard wheel rim brake 24 and a cross member 48 to strengthen the two suspension assemblies 40. Claim 15 was also amended to reflect that a --cable-operated-- wheel rim brake is carried by the lower telescoping tube --proximal to each said portion-- (instead of "at areas") at which the cross member connects to the lower telescoping tubes.

During patent examination, claims must be interpreted as broadly as their terms reasonably allow. See In re Zletz, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). With this in mind, we believe that a fair definition of the claimed term "proximal", particularly in light of the clear lack of specificity in the underlying disclosure of the present application, would be "situated close to", the first Webster's dictionary definition for the term "proximal" given in Exhibit B of appellant's reply brief[9].

Turning now to the Rigaud teaching, it is at once apparent to us from a review of Figure 1, in particular, that the bicycle of Rigaud includes a segment 21 (cross member) that

[9] At the oral hearing counsel for appellant made reference to the decision of the Court of Appeals for the Federal Circuit in General Mills Inc. v. Hunt-Wesson Inc., 103 F.3d 978, 984, 41 USPQ2d 1440, 1444 (Fed. Cir. 1997). In that case the court specifically addressed the recitation of "a close proximal relation" (claim 1) and also referred to the recitation of "a proximal relation" (claim 7). To construe the aforementioned terms, the court looked to intrinsic evidence, e.g., the specification, drawings, prosecution history. The court concluded (p. 1444) that a close proximal relation refers to a positional relationship between a susceptor and a food item in which the susceptor remains closely adjacent the food item throughout a cooking process. Like the court, we also relied in part upon the underlying disclosure, as sparse as it was. Similar to the court's determination of a meaning of "closely adjacent" for somewhat related claim language, we broadly ascertained the claimed term "proximal" to denote a relationship wherein the entities at issue are "situated close to" one another, consistent with the showing in appellant’s drawing (Figure 1).

transversely braces and interconnects a portion of a top part of respective movable telescopic tubes 19,20, and wherein a front brake 28 is carried by the lower telescopic tubes 19,20 proximal (or situated close to) each portion at which the cross member connects the lower telescoping tubes. Thus, the subject matter of claim 15
is anticipated by the Rigaud patent.

As is clear from our analysis above, the argument advanced by appellant is simply not persuasive of the patentability of claims 15 and 16 (which falls with claim 15). As a concluding point, we simply note that Declarant Thorne does not even mention the Rigaud patent, the evidence of anticipation.

The Respective Rejections of 3 Through 7 and
9 Through 14 Under 35 U.S.C. § 103

We do not sustain the rejections of these respective claims based upon the combined teachings of Rigaud and Kawaguchi and Rigaud and Kawamura.

We determined above that claim 2, from which the claims at issue depend, was not anticipated by either Kawaguchi or

Kawamura. We also find that Rigaud does not overcome the deficiencies in the latter teachings. Furthermore, it is clear to us that, collectively considered, the applied prior art in each of the respective rejections under 35 U.S.C. § 103 before us would not have been suggestive of, in particular, the locking function required by the means recitation of parent claim 2.

New Grounds of Rejection

Under the authority of 37 CFR § 1.196(b), this panel of the board enters the following new rejections.

Claims 2 through 7 and 9 through 16 are rejected under 35 U.S.C. § 251 as being based upon a defective reissue declaration.

Every departure from the original claims must be particularly and distinctly specified and supported in the original or a supplemental reissue oath or declaration. See Nupla Corp. v. IXL Mfg. Co., 114 F.3d 191, 193, 42 USPQ2d 1711, 1713 (Fed. Cir. 1997) and In re Constant, 827 F.2d 728, 729, 3 USPQ2d 1479, 1480 (Fed. Cir. 1987), cert. denied, 484 U.S. 894 (1987). Simply as one example of a departure not particularly and distinctly specified and supported in the

original or any of the supplemental declarations filed by appellant, we refer to the change in claim 3, line 7 (amendment filed July 18, 1995) wherein the word "within" has been replaced with the word --between--.

Claims 2, 3, 6, 7, and 9 through 14 are rejected under 35 U.S.C. § 103 as being unpatentable over the conventional pedal driven bicycle set forth in the preamble of appellant's claim 17 in view of Rigaud.

Claim 17 is drafted in Jepson format; 37 CFR § 1.75(e). As such, the preamble (all language before the recitation of "the improvement wherein") is a general description of all elements of the claimed combination which are conventional or known. 37 CFR § 1.75(e)(1). The aforementioned preamble is suggestive of the subject matter of claims 2, 3, and 6 but for the recitation in the preamble of claim 2 of a pair of telescoping suspension assemblies, each of which being disposed on a respective leg of the front fork for carrying the front wheel of a bicycle. The patent to Rigaud, like the preamble of claim 2 evidencing what is conventional, reveals that at the time of

appellant's invention it was known to provide a telescoping suspension assembly on each leg of a front fork for carrying the front wheel of the bicycle.

In applying the test for obviousness[10], we reach the

[10] The test for obviousness is what the combined teachings of references would have suggested to one of ordinary skill in the art. See In re Young, 927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991) and In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981).

would correspond to the function of the means recitation of claim 2 (lines 7 through 13) when a young child, expected to effect low pedal input force, rides the conventional bicycle. As to the subject matter of claim 7, we view the addition of a return port and one-way check valve as obvious and simply the inclusion of a known, essential valve component for an operable suspension system. The latter determination is appropriate since an obviousness question cannot be approached on the basis that artisans having ordinary skill would have known only what they read in references, because such artisans must be presumed to know something about the art apart from what the references disclose. See In re Jacoby, 309 F.2d 513, 516, 135 USPQ 317, 319 (CCPA 1962). As to the subject matter of each of claims 9 through 14, it is clear to us that the Rigaud patent would have been suggestive thereof as advantageous for the modified conventional telescoping suspensions, i.e., the segment 21 and front brake 28 of Rigaud (Figures 1 and 2) would have been suggestive of the claimed system including the cross member, brake cable stop, and wheel rim brake.

Claim 4 is rejected under 35 U.S.C. § 103 as being unpatentable over the conventional pedal driven bicycle set

forth in the preamble of appellant's claim 17 in view of Rigaud, as applied immediately above, further in view of Wallace.

In our opinion, it would have been obvious to include an air space and means for pressurizing same above the fluid in the suspension assemblies of the conventional pedal driven bicycle (preamble of claim 17). The motivation for this modification would have simply been to obtain the known benefit of a pressurized air space in a suspension or shock assembly, following the teaching of Wallace.

Claim 5 is rejected under 35 U.S.C. § 103 as being unpatentable over the conventional pedal driven bicycle set forth in the preamble of appellant's claim 17 in view of Rigaud, as applied above in the new rejection of claims 2 and 3, further in view of Japan (No. 44-2897).

In our view, it would have been obvious to one having ordinary skill in the art to configure the telescoping tubes of the conventional pedal driven bicycle with first and second bushings, a space therebetween, and a port, wherein a bushing may block the port to hydraulically lock the tubes against further expansive movement. The incentive for this modification

would have been to gain the advantage of an oil lock, an expedient known in the art as evidenced by the teaching (Figure 3) of Japan (44-2897)[11].

As to the above rejections under 35 U.S.C. § 103, we have weighed the applied evidence of obviousness with the content of the submitted declarations and magazine articles. The conclusion we reach is that the evidence of obviousness far outweighs the little weight that can be attributed to appellant's showing (secondary evidence of nonobviousness) in the matter of the assertion of widespread adoption of the present invention (brief, pages 11 and 12; Thorne Declaration) and doubt that a workable front wheel suspension for a bicycle could be produced (brief, pages 15,16; magazine articles).

Recommendation Pursuant to 37 CFR § 1.196(d)

This panel of the board recommends that claims 8 and 17, considered allowable by the examiner, be rejected under

[11] Original cancelled claim 1 likewise addressed the subject matter of claim 5. As stated by appellant in the original reissue declaration of the present application, the subject matter of claim 1 was disclosed or at least rendered obvious by the disclosure of Japanese Utility Model Publication No. 44-2897 (Japan 44-2897).

35 U.S.C. § 251 as being based upon a defective reissue declaration for the same reason set forth above in the new ground of rejection of claims 2 through 7 and 9 through 16 under 35 U.S.C. § 251. This application is remanded to the examiner for action on this matter.

In summary, this panel of the board has

reversed the rejection of claims 2 and 3 under 35 U.S.C. § 102(b) as being clearly anticipated by Kawaguchi,

reversed the rejection of claims 2, 3, and 6 under 35 U.S.C. § 102(e) as being clearly anticipated by Kawamura,

affirmed the rejection of claims 15 and 16 under 35 U.S.C. § 102(b) as being clearly anticipated by Rigaud,

reversed the rejection of claims 3 through 7 and 9 through 14 under 35 U.S.C. § 103 as being unpatentable over Rigaud in view of Kawaguchi, and

reversed the rejection of claims 3 through 7 and 9 through 14 under 35 U.S.C. § 103 as being unpatentable over Rigaud in view of Kawamura.

Additionally, we have introduced new grounds of rejection in accordance with 37 CFR § 1.196(b) and remanded the application to the examiner for consideration of a recommendation pursuant to 37 CFR § 1.196(d).

A period of two months is set in which the appellant may submit to the Primary Examiner an appropriate amendment, or a showing of facts or reasons, or both, in order to avoid the grounds set forth in the statement of the Board of Patent Appeals and Interferences under the provisions of 37 CFR § 1.196(d) and/or prosecute further before the Primary Examiner by way of amendment or showing of facts, or both, not previously of record with respect to the new rejection under 37 CFR § 1.196(b) if the appellant so elects.

Upon conclusion of the proceedings before the Primary Examiner on remand, this case should be returned to the Board by the Primary Examiner so that the Board may either adopt its decision as final or render a new decision on all of the claims on appeal, as it may deem appropriate. Such return for this purpose is unnecessary if the application is abandoned expressly or as the result of an unanswered Office action, allowed or again appealed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

The decision of the examiner is affirmed-in-part.

AFFIRMED-IN-PART AND REMANDED

37 CFR 1.196(b) and (d)

IAN A. CALVERT Administrative Patent Judge	)	
IRWIN CHARLES COHEN Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
CHARLES E. FRANKFORT Administrative Patent Judge	)	

Appeal No. 97-0170
Application 08/154,550

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